Rocket No.:

005920 USA/PMG/PCTRL/JW

PATENT/OFFICIAL

DEC 1 8 2003

.. IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re Application of

SHANMUGASUNDRAM et al.

Serial No. 09/943,383

Group Art Unit: 2823

Filed: August 31, 2001

Examiner: William D. Coleman

For:

IN SITU SENSOR BASED CONTROL OF SEMICONDUCTOR PROCESSING

PROCEDURE

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents Alexandria, VA 22313-1450

Sir:

able Commissioner for Patents
adria, VA 22313-1450

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

This submission does not constitute a representation that a search has been made or that no better art exists and does not constitute an admission or representation that any of the listed documents is material or constitutes prior art. If it should be determined that any of the listed documents does not constitute prior art under the United States law, Applicants reserve the right

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to present to the Office the relevant facts and law regarding the appropriate status of such document.

No certification or fee is believed to be required. However, the Commissioner is hereby authorized to charge any additional fees should any be required for this submission, or credit any overpayment to deposit account no. 08-0219.

Respectfully submitted,

HALE AND DORR LLP

Scott M. Alter

Registration No. 32,879

Reston Town Center 11951 Freedom Drive Reston, VA 20190

TEL (703) 654-7021 SMA/mgm

FAX (703),654-7100

Date: 12((8/2)

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SHEET 1 OF 2

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)

ATTY. DOCKET NO. 005920 USA/PMG/PCTRL/JW SERIAL NO. 09/943,383

APPLICANT

SHANMUGASUNDRAM et al.

FILING DATE August 31, 2001 GROUP 2823

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING) DATI	
	4,207,520	06/10/80	Flora et al.			04/06/	78	
	4,209,744	06/24/80	Gerasimov et al.			03/27/	78	
	4,609,870	09/02/86	Lale et al.			09/13/	84	
	4,755,753	07/05/88	Chern			07/23/	86	
	5,427,878	06/27/95	Corliss			05/16/94		
	5,534,289	07/09/96	Bilder et al.			01/03/95		
	5,867,389	02/02/99	Hamada et al.		<u> </u>	11/26/96		
	6,041,263	03/21/00	Boston et al.			10/01/97		
	6,077,412	06/20/00	Ting et al.			10/30/98		
	6,271,670	08/07/01	Caffey			02/08/99		
	6,400,162	06/04/02	Mallory et al.			07/21/00		
	US 2002/0077031	06/20/02	Johansson et al.			07/06/01		
	6,442,496	08/27/02	Pasadyn et al.			08/08/00		
	6,563,308	05/13/03	Nagano et al.			03/27/	01	
	6,587,744	07/01/03	Stoddard et al.			06/20/00		
	The second secon	FOR	EIGN PATENT DOCUMENTS				- ,	
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation		
				CLASS		Yes	No	
	WO 01/11679	02/15/01	WIPO			Х	T	
	WO 01/080306	10/25/01	WIPO			X		
	ОТНЕК	ART (Inclu	ding Author, Title, Date, Pertine	nt Pages, Etc	:.)	•	•	
			n, and J. D. Wiley. July 1976. "Control of the control of the cont					
	1000 40	D 11 D	'. (O) . D	137				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

2000. "Microsense II Capacitance Gaging System." www.adetech.com.

www.Lehighton.com/fabtech1/index.html.

1999. "Contactless Bulk Resistivity/Sheet Resistance Measurement and Mapping Systems."

DATE CONSIDERED

DEC 1 8 2003

SHEET 2 OF 2

INFORMATION DISCLOSURE CITATION IN AN **APPLICATION** (PTO-1449)

ATTY. DOCKET NO. 005920 USA/PMG/PCTRL/JW SERIAL NO. 09/943,383

APPLICANT SHANMUGASUNDRAM et al.

FILING DATE GROUP August 31, 2001 2823

		FOR	EIGN PATENT DOCUMENTS								
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Trans	slation No				
	OTHER	ART (Inclu	ding Author, Title, Date, Pertinent	Pages, Etc	.)	<u> </u>	<u> </u>				
	El Chemali, Chadi et al. July/August 2000. "Multizone uniformity control of a chemical mechanical polishing process utilizing a pre- and postmeasurement strategy." J. Vac. Sci. Technol. Volume 18, No. 4. pp. 1287 – 1296. March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film Thickness and End-point Control System." http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74. 2002. "Microsense II – 5810: Non-Contact Capacitance Gaging Module." www.adetech.com.										
 											
	08 August 2003. PCT International Search Report from PCT/US03/08513.										
	14 October 2003. PCT International Search Report from PCT/US02/21942.										
	20 October 2003. PCT International Search Report from PCT/US02/19116.										
	23 October 2003. PCT International Preliminary Examination Report from PCT/US01/24910.										
	"NanoMapper wafer nanotopography measurement by ADE Phase Shift." http://www.phase-shift.com/nanomap.shtml.										
	"Wafer flatness measurement of advanced wafers." http://www.phase-shift.com/wafer-flatness.shtml.										
	"ADE Technologies, Inc. – 6360." http://www.adetech.com/6360.shtml.										
	"3D optical profilometer MicroXAM by ADE Phase Shift." http://www.phase-shift.com/microxam.shtml.										
	"NanoMapper FA fa shift.com/nanomapp	actory automa	ation wafer nanotopography measure	ment." http:/	//www.phase-	"	_				
EXAMINER			DATE CONSIDERED			_					
(AMINER: Init	al if reference considered, ot considered. Include cop	whether or not ci ny of this form w	itation is in conformance with MPEP 609; dra ith next communication to Applicant.	w line through	DEC 24 2003	RECEIVED	•				